

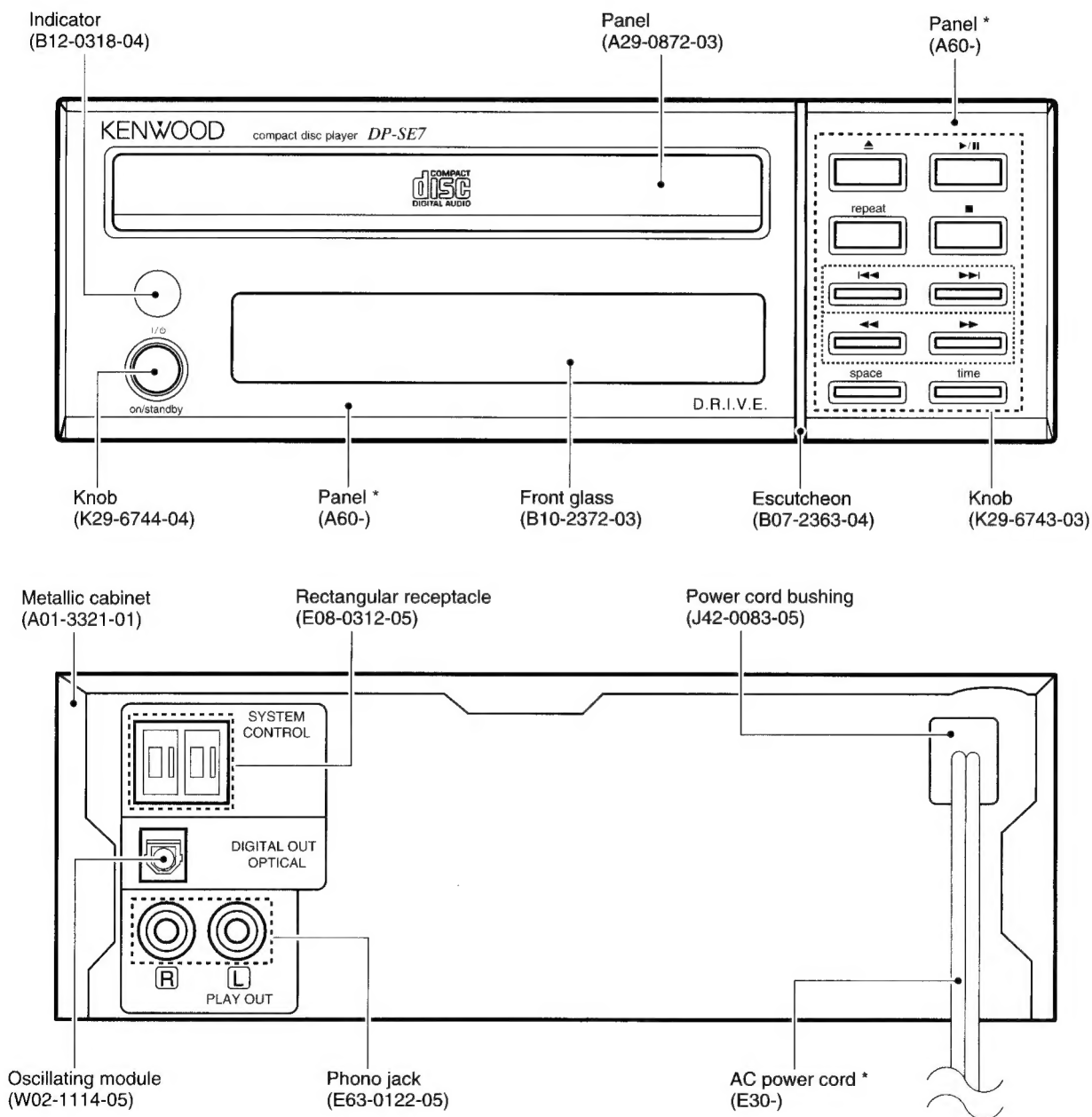
DP-SE7/SE7(G)/SE9

SERVICE MANUAL

(HM-701)

KENWOOD

©1997-10/B51-5371-00 (K/K) 3191



In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

KENWOOD-Corp. certifies this equipment conforms to DHHS Regulations No. 21 DFR 1040. 10, Chapter 1, Subchapter J.

**DANGER : Laser radiation when open and interlock defeated.
AVOID DIRECT EXPOSURE TO BEAM**

Illustration is DP-SE7Mtype.

* Refer to parts list on page 17.

Refer to DP-SA7 service manual (B51-5243-00) if you require Disassembly for repair in detail.

DP-SE7/SE7(G)/SE9

CONTENTS / EXTERNAL VIEW

Contents

| | | | |
|--------------------------------|---|-------------------------|------------|
| CONTENTS / EXTERNAL VIEW | 2 | SCHEMATIC DIAGRAM | 9 |
| CIRCUIT DESCRIPTION | 3 | EXPLODED VIEW | 15 |
| ADJUSTMENT | 6 | PARTS LIST | 17 |
| PC BOARD | 7 | SPECIFICATIONS | Back cover |

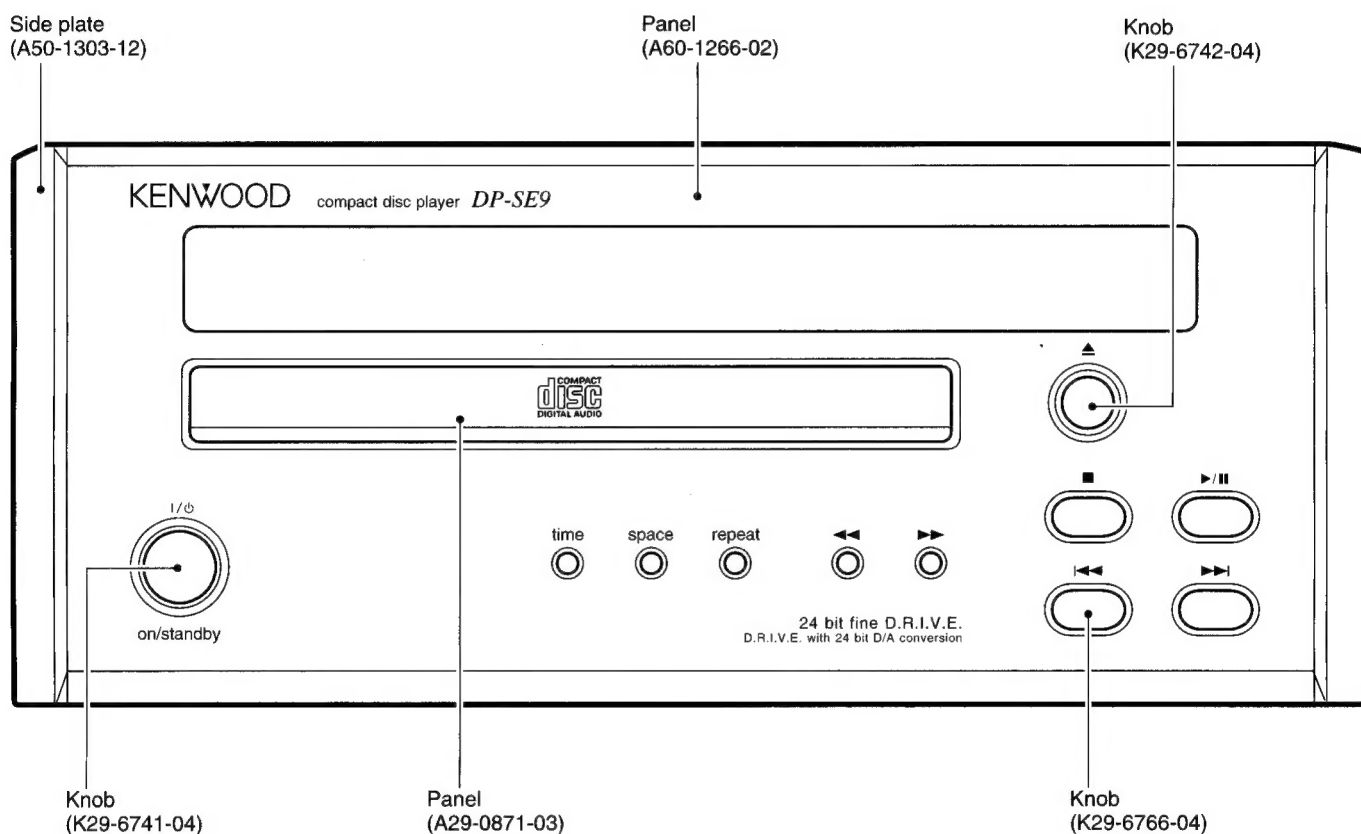


Illustration is DP-SE9.

System configuration

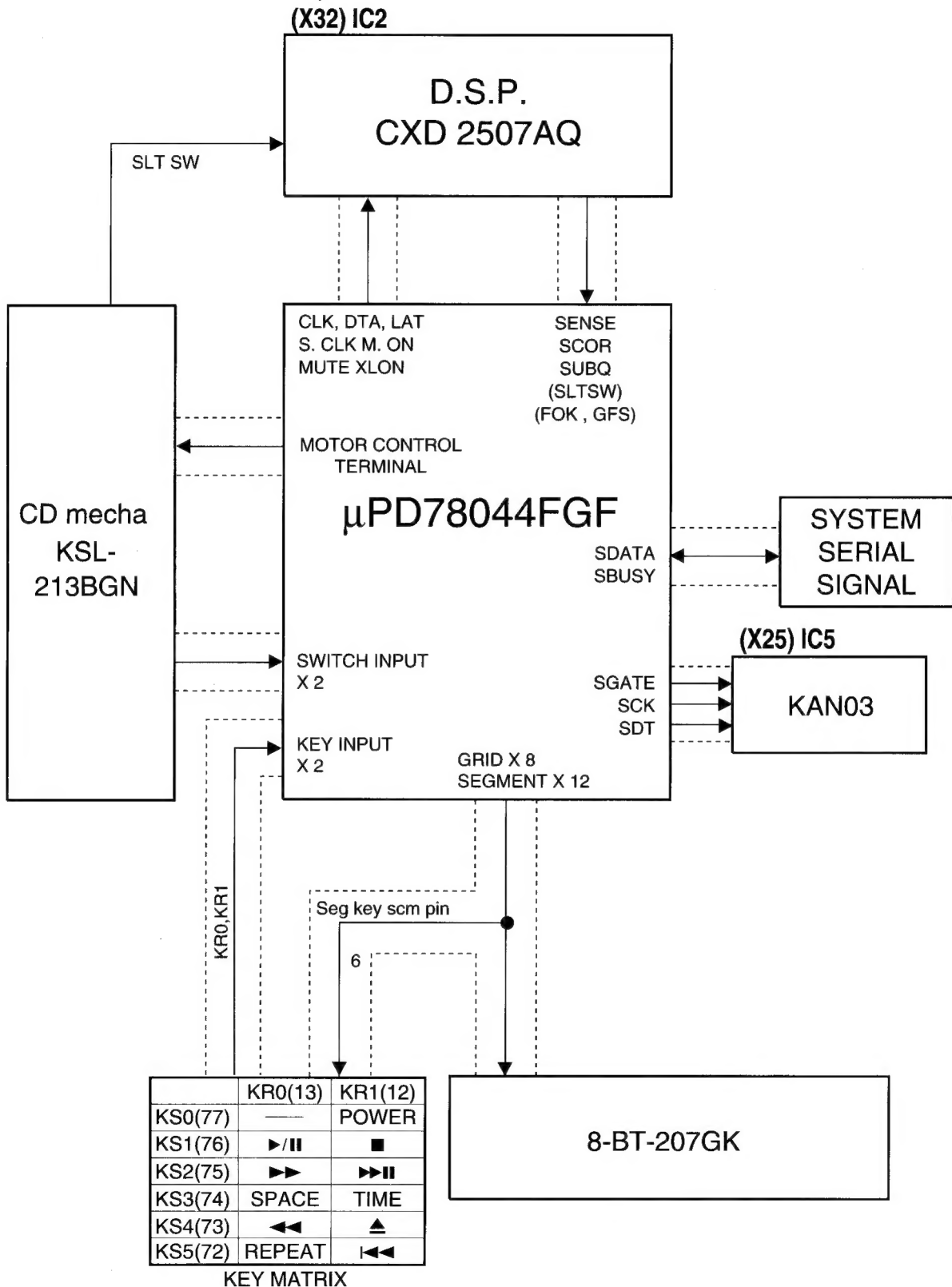
| SYSTEM NAME | RECEIVER | CD PLAYER | SPEAKER |
|-------------|----------|-----------|---------|
| HM-701 | R-SE7 | DP-SE7 | LS-SE7 |
| HM-901 | R-SE9 | DP-SE9 | LS-SE9 |

DP-SE7/SE7(G)/SE9

CIRCUIT DESCRIPTION

1. Microprocessor

1-1. Microprocessor periphery block diagram



DP-SE7/SE7(G)/SE9

CIRCUIT DESCRIPTION

1-2 Pin description

(uPD78044FGF-071 : X25, IC4)

| PIN No. | PIN NAME | I/O | DESCRIPTION |
|---------|------------------|-----|---|
| 1~7 | Grid 2G~8G | O | FL Digit control (Grid 2G~8G) |
| 8 | Vdd | O | Power supply (+5) |
| 9 | SQCK | O | Q-data read clock output. |
| 10 | STBY | O | Not use (OPEN) |
| 11 | SUBQ | I | Q-data (or SLT SW) input |
| 12 | KR 1 | I | Key return input 1 |
| 13 | KR 0 | I | Key return input 0 |
| 14~16 | NC | I | Not use (PULL DOWN) |
| 17 | RESET | I | Reset input |
| 18, 19 | NC | I | Not use (PULL DOWN) |
| 20 | AVss | - | Not use (GND) |
| 21~24 | NC | I | Not use (PULL DOWN) |
| 25 | SDT | O | Enable output to KAN03 |
| 26 | SCK | O | Clock output to KAN03 |
| 27 | S GATE | O | Data output for KAN03 |
| 28 | NC | I | Not use |
| 29 | AVdd | - | Not use (+5V) |
| 30 | AVref | - | Not use (GND) |
| 31 | DEFECT | I | Scratch disk compel sat |
| 32 | XT2 | - | Not use (OPEN) |
| 33 | Vss | - | GND |
| 34 | X1 | I | System clock |
| 35 | X2 | - | System clock |
| 36 | RMUTE | O | Analog mute |
| 37 | CLK | O | CXD2507AQ clock output |
| 38 | LATCH | O | CXD2507AQ latch output |
| 39 | DATA | O | CXD2507AQ data output |
| 40 | SENSE | I | SENSE/GFS/F.OK input |
| 41 | D.S | O | Not use |
| 42 | S.DATA | I/O | Serial DATA I/O |
| 43 | S.BUSY | I/O | Serial BUSY I/O |
| 44 | SCOR | I | Sub-code synch detect |
| 45 | NC | I | Not use (PULL DOWN) |
| 46 | M.ON | O | Focus lock compensation |
| 47 | REMOCON | I | REMOCON |
| 48 | Vpp | - | GND |
| 49 | CLOSE SW | I | Tray close (L : close) |
| 50 | OPEN SW | I | Tray open (L : open) |
| 51 | NC | I | Not use (PULL DOWN) |
| 52 | Vdd | - | Power supply (+5V) |
| 53 | OPEN MOTOR | O | Motor [OPEN] (H : OPEN/T.U.DOWN) |
| 54 | CLOSE MOTOR | O | Motor [CLOSE] (H : CLOSE/T.U.UP) |
| 55~64 | NC | O | Not use (OPEN) |
| 65~70 | Sa~Sf | O | FL Segment (SEG Sa~Sf) |
| 71 | Vlrd | - | FL driver power supply (-30V) |
| 72~77 | SEG Sg~Sl/KS 5~0 | O | FL Segment Sg~Sl and key scan (KS5~KS0) |
| 78, 79 | NC | O | Not use (open) |
| 80 | GRID 1G | O | FL digit (Grid 1G) |

CIRCUIT DESCRIPTION

2. Test mode

| MODE "0 0" : Use for Test or alignment | | | | |
|---|-------------------|---------|--|---|
| Setting the test mode : While pressing the "REPEAT" key, plug the AC cord into wall output. | | | | |
| No. | Key | Display | Operation | Remarks |
| 1 | PLAY/ PAUSE ▶/ | 03 | (1)Focus servoON (2) Tracking servoOFF (3) Feed servoOFF | TE-adjustment |
| | | 05 | (1) Focus servoON (2) Tracking servoON (3) Feed servoON | F-GAIN / T-GAIN FE-B adjustment |
| 2 | UP ▶▶ | | <input type="checkbox"/> All display ON → All display OFF | |
| 3 | FB ◀◀ | 01 | Pick manual feed (outside → inside) | Stop mode only Time display goes off |
| | | 05 | FB operation is available | |
| 4 | FF ▶▶ | 01 | Pick manual feed(inside → outside) | Stop mode only Time display goes off |
| | | 05 | FF operation is available | |
| 5 | STOP ■ | 01 | Pick-up initialize | |
| 6 | OPEN / CLOSE ▲ | | Tray open / close | |
| 7 | DOWN ◀◀ | 01 | Cancel the test mode, and return to normal mode. | Play track No.01 |

DP-SE7/SE7(G)/SE9

ADJUSTMENT

| No. | ITEM | INPUT SETTINGS | OUTPUT SETTINGS | PLAYER SETTINGS | ALIGNMENT POINTS | ALIGN FOR | FIG. |
|---|------------------------|--|---|--|-------------------|---|------|
| While pressing the "REPEAT" key, turn the AC ON. { Refer to test mode (MODE 0 0) } | | | | | | | |
| 1 | LASER POWER | — | Apply the sensor section of optical power meter on the pickup lens. | Press the PLAY/PAUSE key, then confirm that the LED is "03". | — | On the power from 0.08 to 0.15 mW, when the diffraction grating is correctly aligned with the RF level of 0.6 Vp-p or more. | (a) |
| 2 | FOCUS ERROR BIAS | Test disc Type 4 | Connect an oscilloscope as follows. CH1 : RF (CN3 pin 1) CH2 : TE (CN3 pin 6) | Press the PLAY/PAUSE key, then confirm that the LED is "05". | FE BIAS VR2 | Optimum eye pattern | |
| 3 | TRACKING ERROR BALANCE | Test disc Type 4 | Connect an oscilloscope as follows. CH1 : RF (CN3 pin 1) CH2 : TE (CN3 pin 6) | Press the PLAY/PAUSE key, then confirm that the LED is "03". | TE BALANCE VR1 | Symmetry between upper and lower patterns | |
| 4 | TRACKING GAIN | Test disc Type 4 Apply signal of 1.2 kHz, 50mVrms to CN3 pin 5-6. | Connect a LPF to CN3 pin 5-6 to which you connect an oscilloscope or AC voltmeters. | Press the PLAY/PAUSE key, then confirm that the LED is "05". | TRACKING GAIN VR3 | Two VTVMs should read the same value. | (e) |

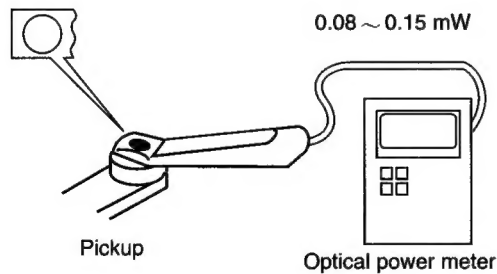
Note:

Type 4 disc : SONY YEDS-18 Test Disc or equivalent.(KTD-0*)

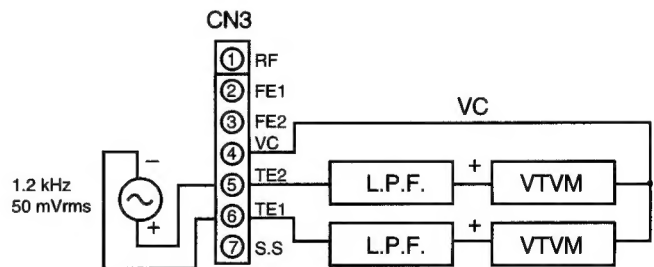
LPF: Around 47 kΩ+ 390 pF or so.

Step 1~4 are in Test Mode.

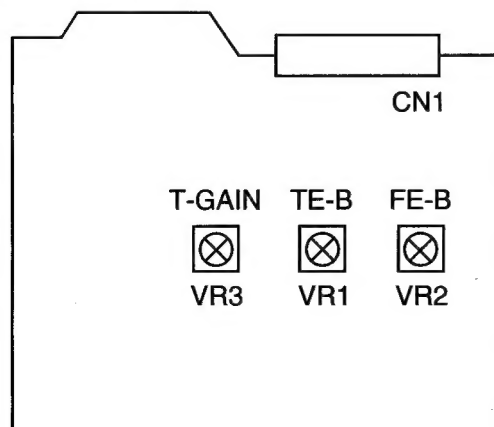
(a) Laser power



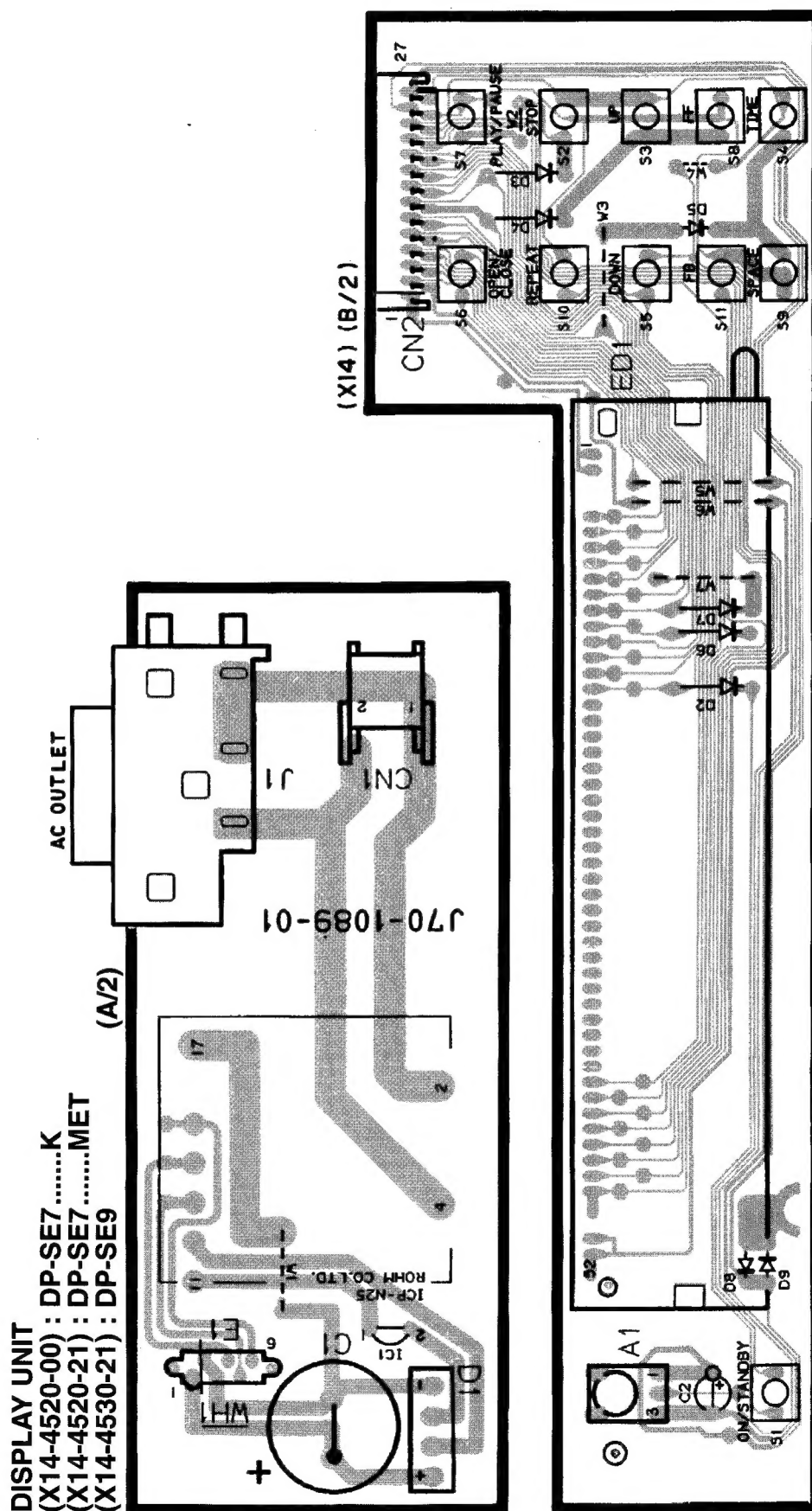
(e) Tracking gain



ALIGNMENT POINTS



PC BOARD(Component side view)

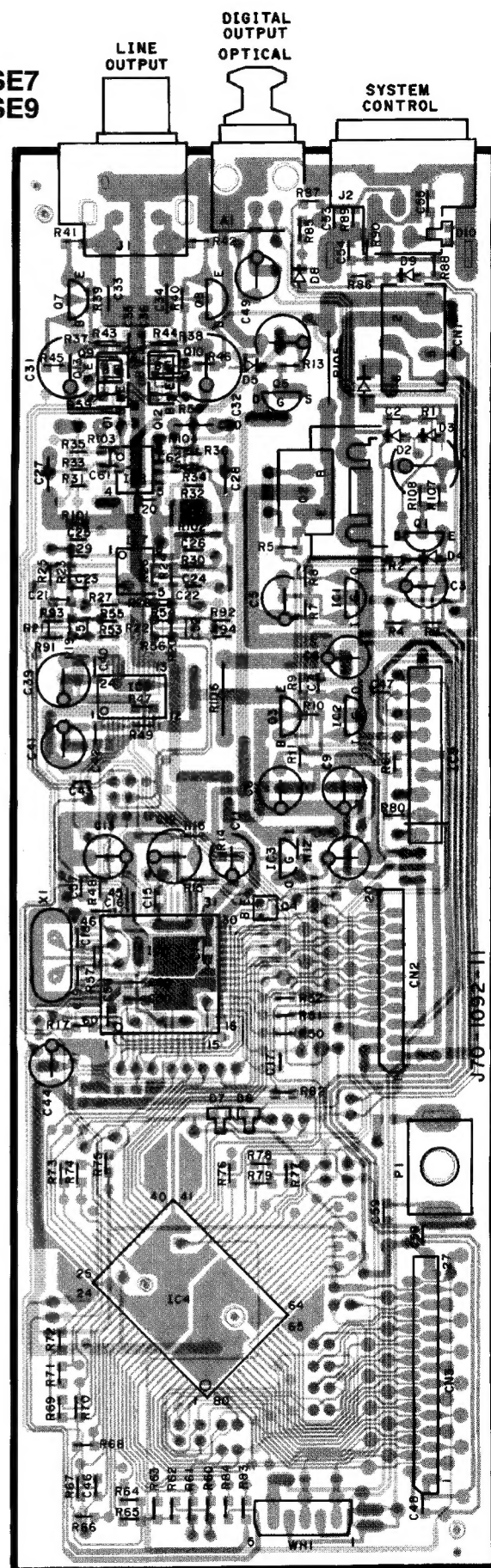
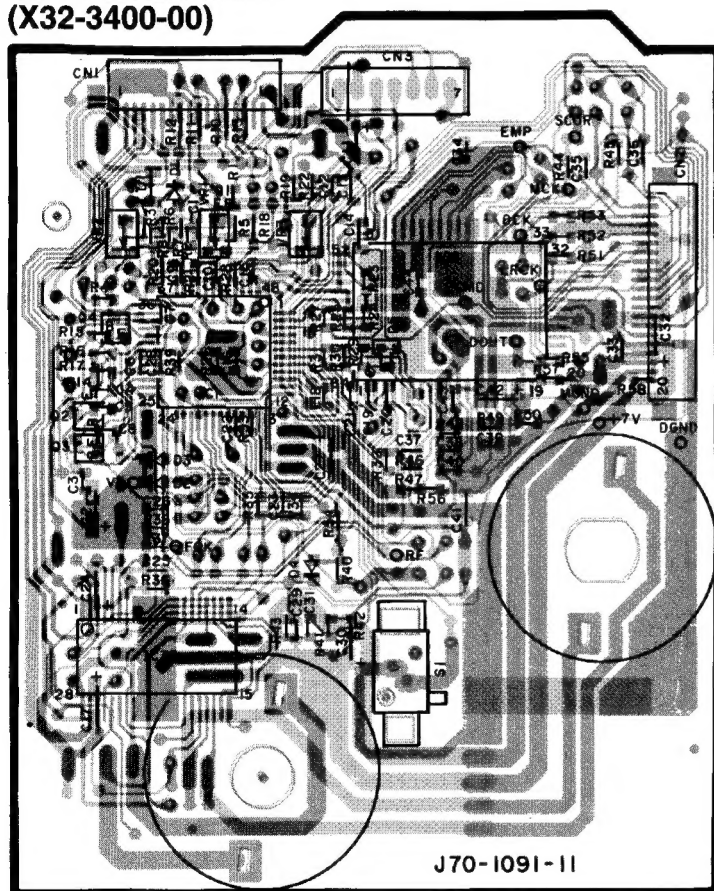


Refer to the schematic diagram for the value of resistors and capacitors.

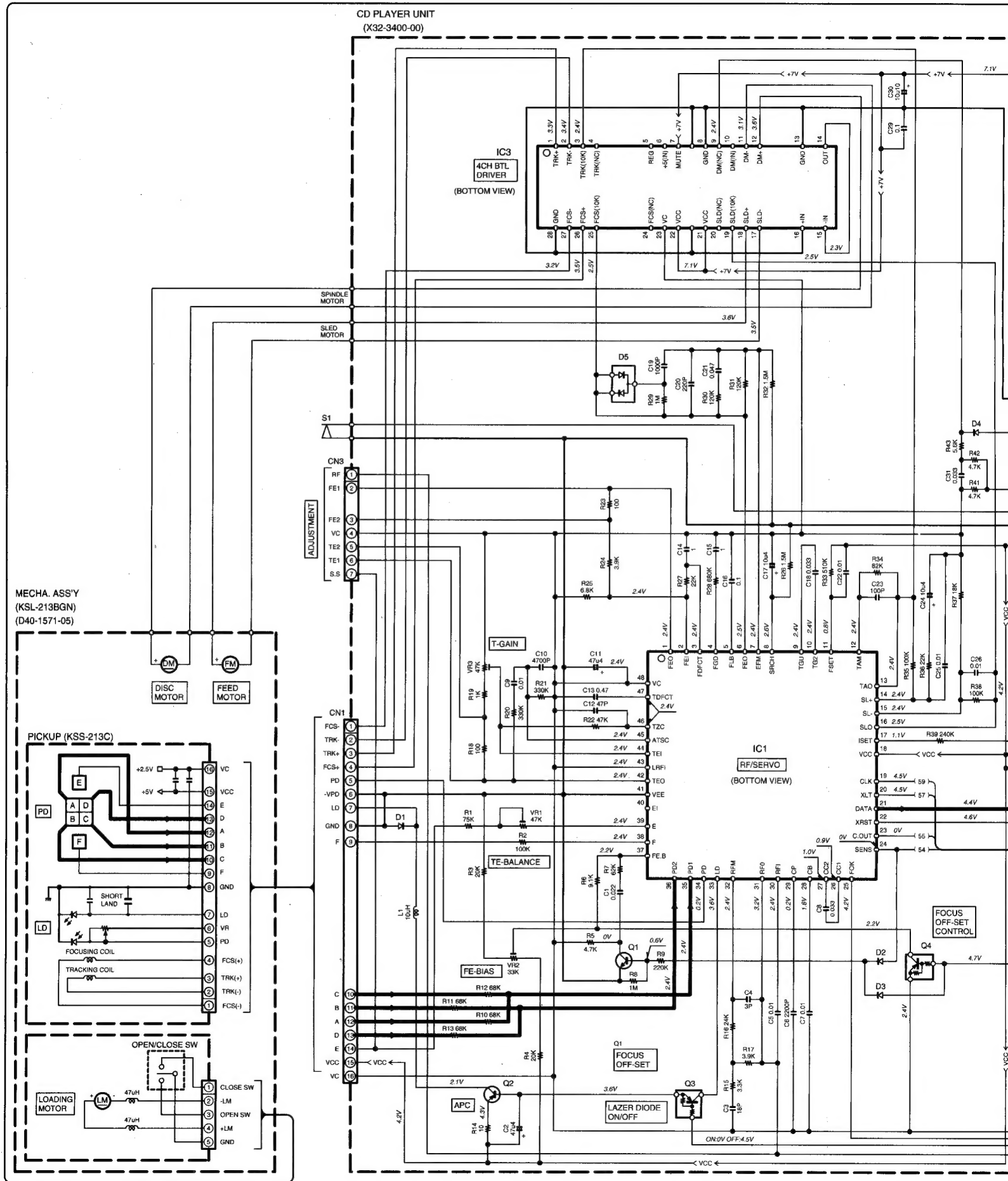
PC BOARD(Component side view)

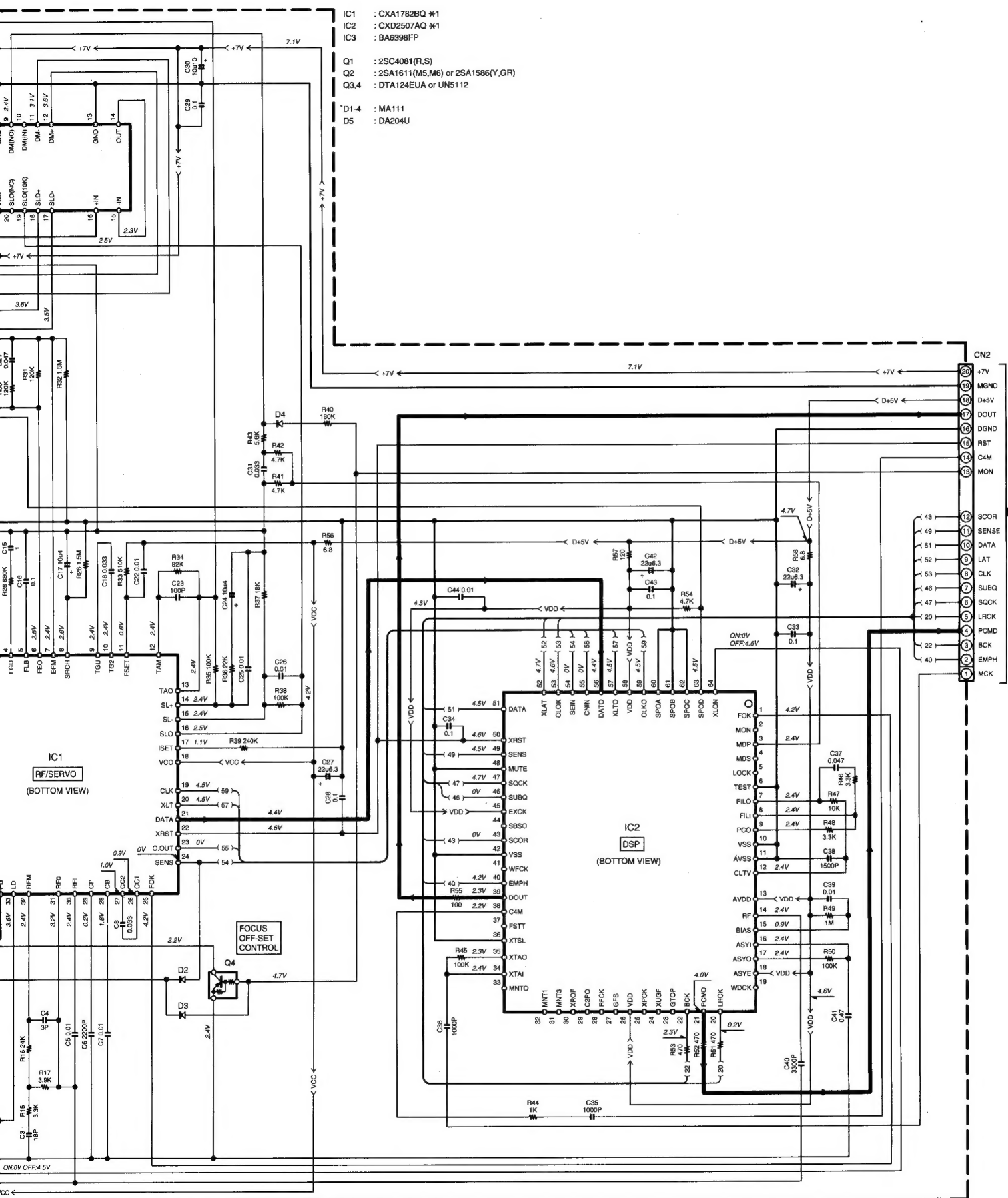
ELECTRIC UNIT
(X25-6000-00) : DP-SE7
(X25-6000-01) : DP-SE9

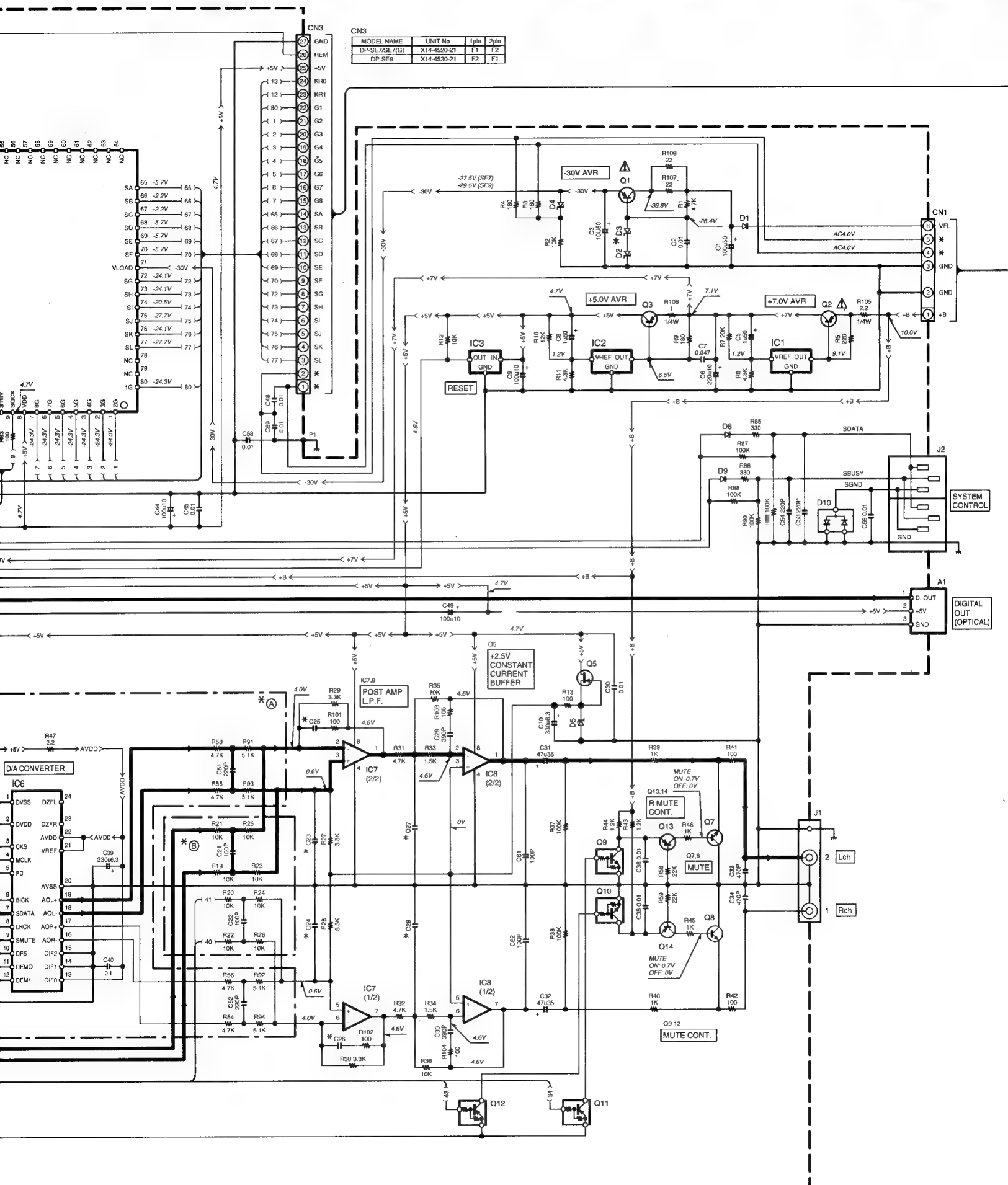
CD PLAYER UNIT (X32-3400-00)



Refer to the schematic diagram for the value of resistors and capacitors.

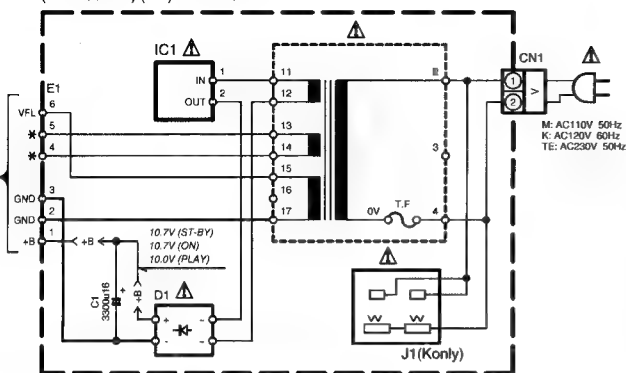






| MODEL NAME | UNIT No. | 4pin | 5pin |
|---------------|-------------|------|------|
| DP-SE7/SE7(G) | X14-4520-21 | F1 | F2 |
| DP-SE9 | X14-4530-21 | F2 | F1 |

(X14-4520-21) (A/2) : DP-SE7/DP-SE7(G)
(X14-4530-21) (B/2) : DP-SE9

DP-SE9 (X25-6000-01)

| | | | | | | | | | | | |
|----------------|------|----------|-----|-----|-----|--------|-----|--------|--------|---------|-------|
| DESTINATION | | UNIT No. | IC8 | Q4 | D3 | (A) | (B) | R50-52 | C23-26 | C27, 28 | |
| COUNTRY | ABB. | | | | | | | | | | |
| GENERAL MARKET | M | | | | | | | | | | |
| U.K. | T | | | | | | | | | | |
| EUROP | | E | -00 | YES | YES | UDZ15B | YES | NO | YES | 220P | 2700P |

DP-SE7 (X25-6000-00)

| DESTINATION | | UNIT No. | IC6 | Q4 | O3 | (A) | (B) | R50-52 | C23-26 | C27, 28 |
|----------------|------|----------|-----|----|--------|-----|-----|--------|--------|---------|
| COUNTRY | ABB. | | | | | | | | | |
| GENERAL MARKET | M | -00 | NO | NO | UDZ13B | NO | YES | NO | 100P | 3300P |
| U.K. | T | | | | | | | | | |
| EUROP | E | | | | | | | | | |
| USA | K | | | | | | | | | |

DP-SE7(G) (X25-6000-00)

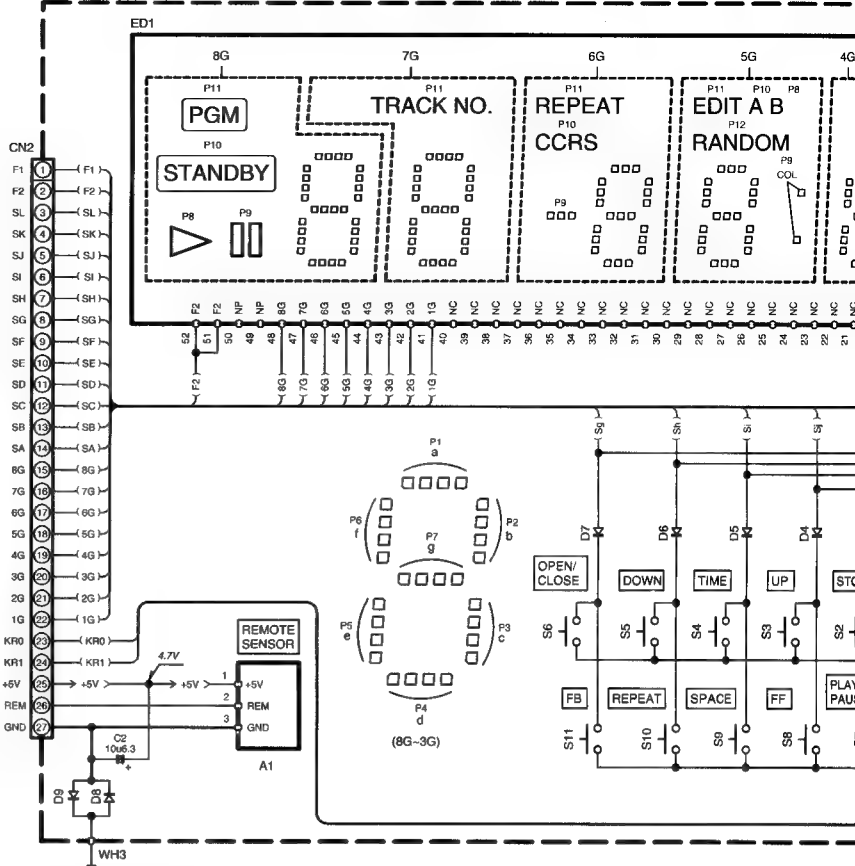
| DESTINATION | | UNIT No. | IC6 | Q4 | D3 | (A) | (B) | R50-52 | C23-26 | C27, 28 |
|-------------|------|----------|-----|----|--------|-----|-----|--------|--------|---------|
| COUNTRY | ABB. | | | | | | | | | |
| U.K. | T | -00 | NO | NO | UDZ13B | NO | YES | NO | 100P | 3300P |

| | |
|-------|------------------|
| IC1,2 | : M5237L |
| IC3 | : PST933D-T |
| IC4 | : uPD78044FGF071 |
| IC5 | : KAN03 |
| IC6 | : AK4324-VF |
| IC7,8 | : NJM2100M |
| IC9 | : TA8409S |

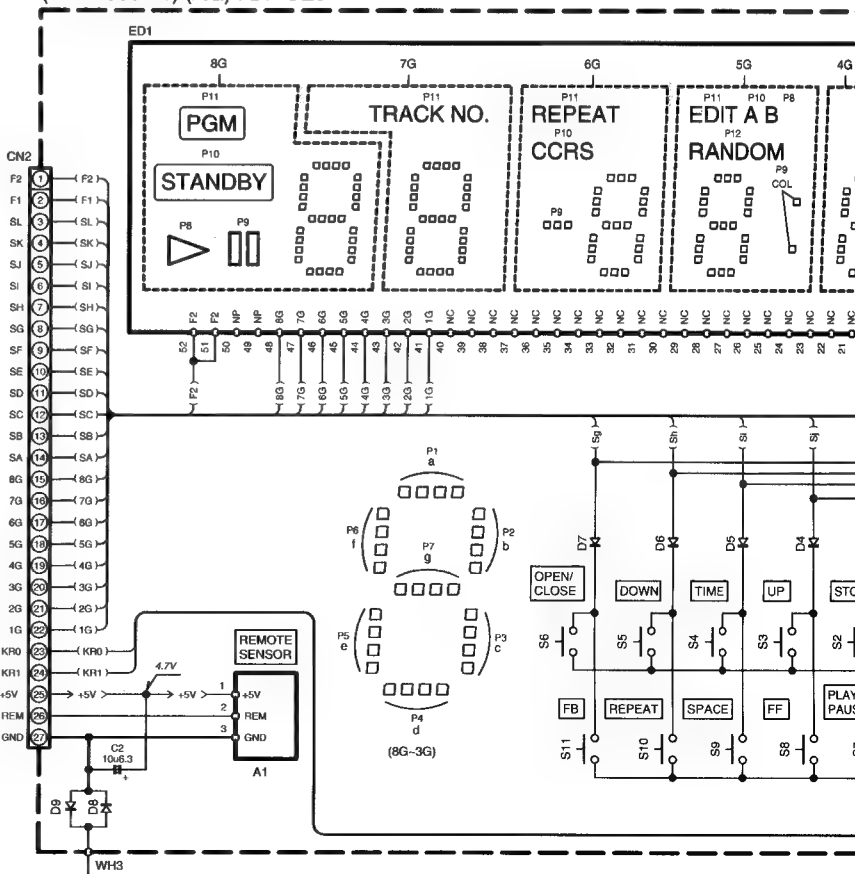
| | |
|---------|-----------------------------------|
| Q1 | : 2SA954(L,K) |
| Q2 | : 2SB1370 or 2SB1375 |
| Q3 | : 2SC3940A(R,S) |
| Q4,9,10 | : DTC124EUA or UN5212 |
| Q5 | : 2SK246(Y,GR) |
| Q7,8 | : 2SD1450(S,T) |
| Q11,12 | : DTA124EUA or UN5112 |
| Q13,14 | : 2SA1611(M5,M6) or 2SA1586(Y,GR) |

| | |
|---------|------------------------|
| D1 | : S5688B or 1SR139-400 |
| D2 | : UDZ15B |
| D3 | : * |
| D4 | : UDZ5.1B |
| D5 | : UDZ2.7B |
| D6,7,10 | : DA204U |
| D8,9 | : MA111 |

DISPLAY UNIT (X14-4520-21) (B/2) : DP-SE7/DP-SE7(G)
(X14-4530-21) (B/2) : DP-SE9

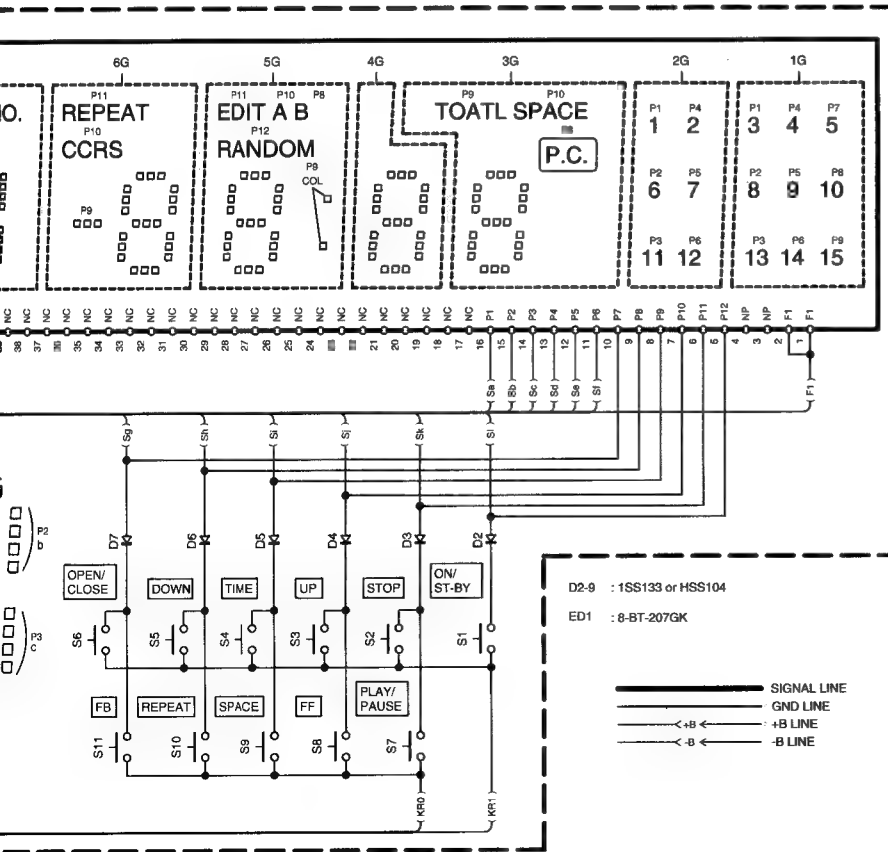
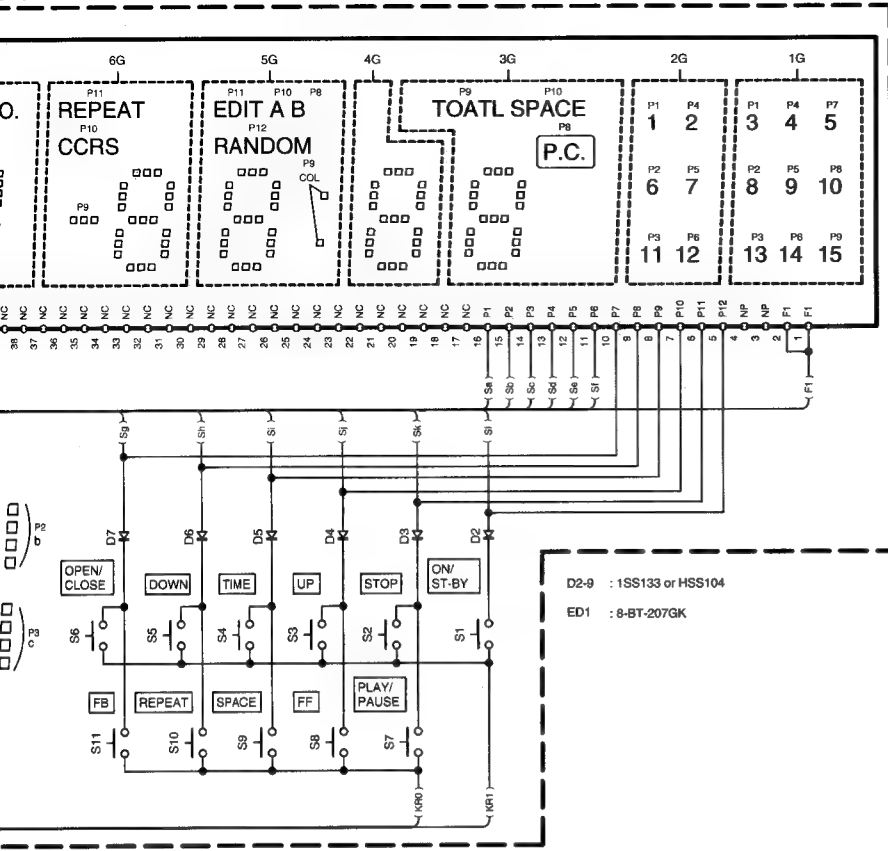


DISPLAY UNIT
(X14-4530-21) (A/2) : DP-SE9



DP-SE7/DP-SE7(G

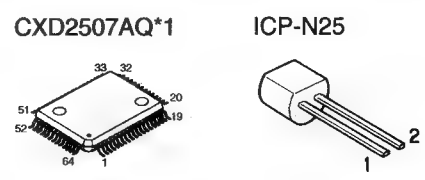
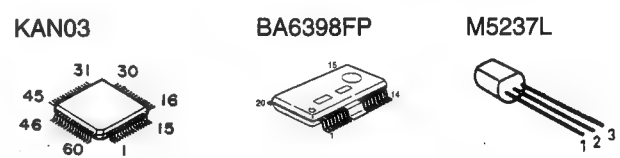
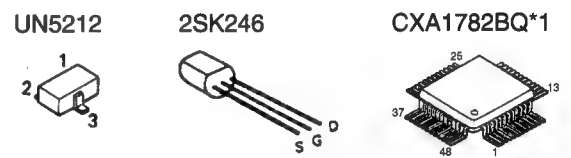
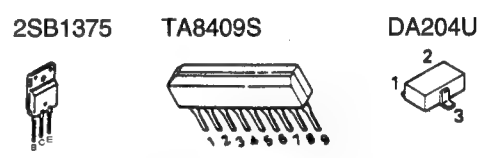
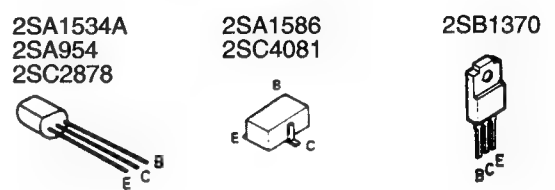
SE7/DP-SE7(G)
SE9



DP-SE7/DP-SE7(G)/DP-SE9

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

The DC voltage is an actual reading measured with a high impedance type voltmeter. The measurement value may vary depending on the measuring instruments used or on the product. Refer to the voltage during PLAY unless otherwise specified; The value shown in () is the voltage measured at the moment of STOP.

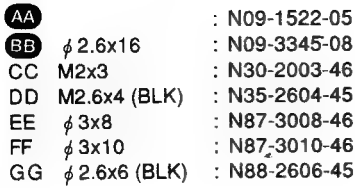


— SIGNAL LINE
— GND LINE
— +B LINE
— -B LINE

DP-SE7/SE7(G)/SE

KENWOOD

E

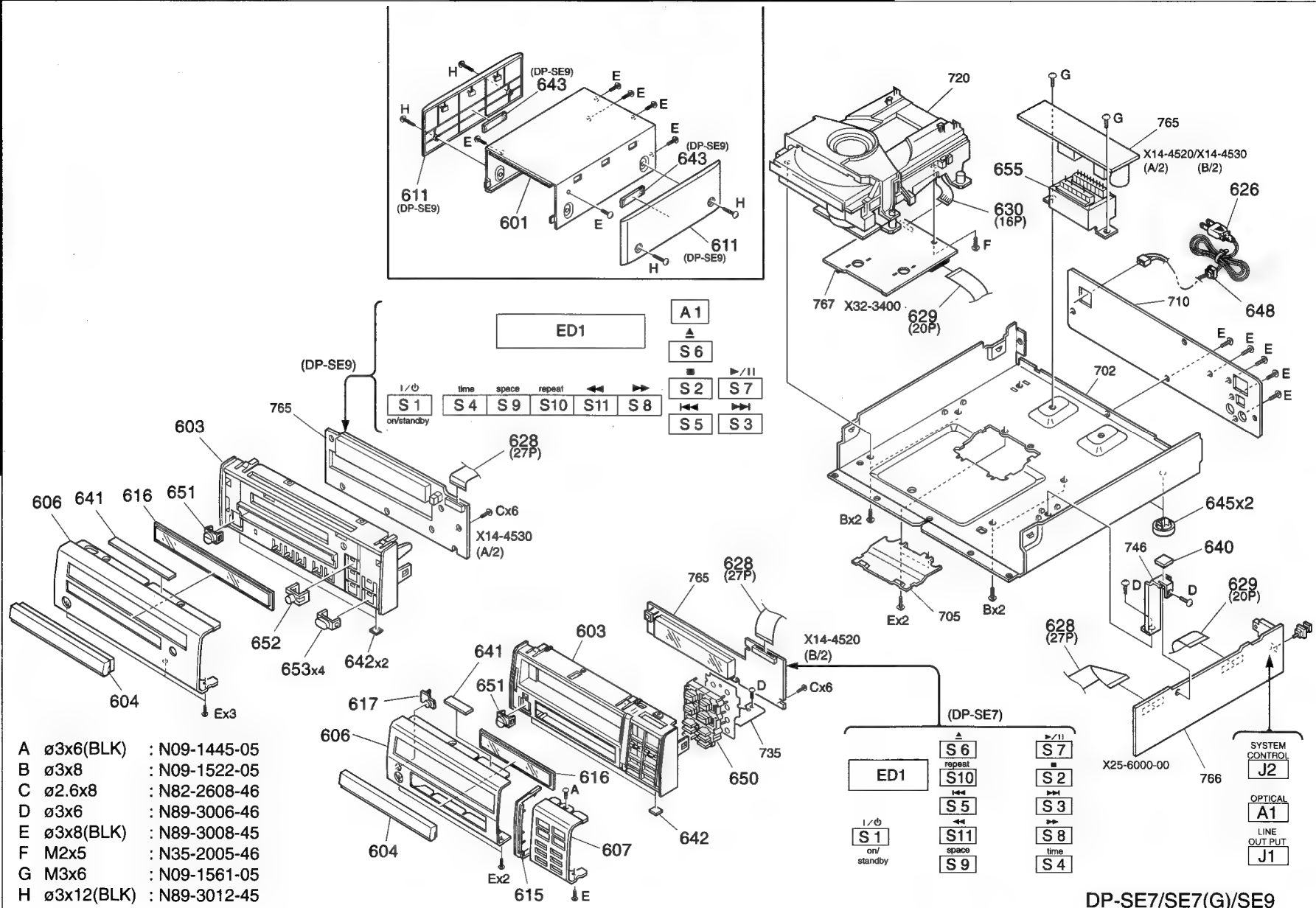


2

3

DP-SE7/SE7(G)/SE9

EXPLODED VIEW (UNIT)



- A $\phi 3 \times 6$ (BLK) : N09-1445-05
- B $\phi 3 \times 8$: N09-1522-05
- C $\phi 2.6 \times 8$: N82-2608-46
- D $\phi 3 \times 6$: N89-3006-46
- E $\phi 3 \times 8$ (BLK) : N89-3008-45
- F M2x5 : N35-2005-46
- G M3x6 : N09-1561-05
- H $\phi 3 \times 12$ (BLK) : N89-3012-45

DP-SE7/SE7(G)/SE9

Parts with exploded numbers larger than 700 are not supplied.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

1

| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|----------------------|----------|-----------|-------------|----------------------------|--------------|----------|
| DP-SE7/SE7(G) | | | | | | |
| 601 | 1D | | A01-3321-01 | METALLIC CABINET | | |
| 603 | 2D | | A22-1778-11 | SUB PANEL | | |
| 604 | 2C | | A29-0872-03 | PANEL | | |
| 606 | 2C | | A60-1199-13 | PANEL | MT1T2E | |
| 606 | 2C | * | A60-1345-03 | PANEL | K | |
| 607 | 2D | | A60-1200-03 | PANEL | | |
| 607 | 2D | | A60-1298-03 | PANEL (GOLD) | MT1EK | |
| 615 | 2D | | B07-2363-04 | ESCUTCHEON | | |
| 616 | 2D | | B10-2372-03 | FRONT GLASS | | |
| 617 | 2C | | B12-0318-04 | INDICATOR | | |
| - | | | B46-0328-03 | WARRANTY CARD | K | |
| △ 626 | 1E | | E30-2592-15 | AC POWER CORD | ME | |
| △ 626 | 1E | | E30-2650-05 | AC POWER CORD | K | |
| △ 626 | 1E | | E30-2721-05 | AC POWER CORD | T1T2 | |
| 628 | 2D,2E | | E35-1983-05 | FLAT CABLE 27P | | |
| 629 | 1E,2E | | E35-1984-05 | FLAT CABLE 20P | | |
| 630 | 1E | | E35-1985-05 | FLAT CABLE 16P | | |
| 640 | 2E | | G11-2283-04 | CUSHION | | |
| 641 | 2D | | G11-2284-04 | CUSHION | | |
| 642 | 2D | | G11-2342-04 | CUSHION | | |
| - | | | H10-7355-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | | | H10-7356-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | | | H12-2359-04 | PACKING FIXTURE | T1T2 | |
| - | | | H25-1579-04 | PROTECTION BAG | EK | |
| - | | | H25-1581-04 | PROTECTION BAG | T1T2 | |
| - | | | H25-1620-04 | PROTECTION BAG | M | |
| - | | | H50-2498-04 | ITEM CARTON CASE | MEK | |
| - | | * | H50-2500-04 | ITEM CARTON CASE | T1 | |
| - | | * | H50-2566-04 | ITEM CARTON CASE | T2 | |
| △ 645 | 2E | | J02-0370-05 | FOOT | | |
| △ 648 | 1E | | J42-0083-05 | POWER CORD BUSHING | | |
| - | | | J61-0307-05 | WIRE BAND | MT1T2E | |
| 650 | 2D | | K29-6743-03 | KNOB | | |
| 651 | 2D | | K29-6744-04 | KNOB POWER | | |
| △ 655 | 1E | * | L07-2436-05 | POWER TRANSFORMER | M | |
| △ 655 | 1E | * | L07-2437-05 | POWER TRANSFORMER | T1T2E | |
| △ 655 | 1E | * | L07-2505-05 | POWER TRANSFORMER | K | |
| S1 | | | S74-0065-05 | LEAF SWITCH | | |
| DP-SE9 | | | | | | |
| 601 | 1D | | A01-3465-01 | METALLIC CABINET | | |
| 603 | 1C | | A22-1777-01 | SUB PANEL | | |
| 604 | 2C | | A29-0871-03 | PANEL | | |
| 606 | 2C | * | A60-1266-02 | PANEL | | |
| 611 | 1D | | A50-1303-02 | SIDE PLATE | | |
| 616 | 2C | | B10-2370-03 | FRONT GLASS | | |
| △ 626 | 1E | | E30-2592-15 | AC POWER CORD | ME | |
| △ 626 | 1E | | E30-2721-05 | AC POWER CORD | T | |
| 628 | 2D,2E | | E35-1983-05 | FLAT CABLE 27P | | |
| 629 | 1E,2E | | E35-1984-05 | FLAT CABLE 20P | | |

L : Scandinavia K : USA P : Canada R : Mexico T1 : GRAY
Y : PX(Far East, Hawaii) T : Europe E : Europe G : Germany T2 : GOLD
Y : AAFES(Europe) X : Australia M : Other Areas

△ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

2

| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|-----------------------------------|----------|-----------|--------------|----------------------------|--------------|----------|
| 630 | 1E | | E35-1985-05 | FLAT CABLE 16P | | |
| 641 | 2C | | G11-2352-04 | CUSHION PANEL | | |
| 642 | 2C | | G11-2325-04 | CUSHION FOOT | | |
| 643 | 2C | | G11-2353-04 | CUSHION SIDE PLATE | | |
| - | | | H10-7353-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | | * | H10-7354-02 | POLYSTYRENE FOAMED FIXTURE | | |
| - | | | H12-2356-04 | PACKING FIXTURE | T | |
| - | | | H25-1579-04 | PROTECTION BAG | E | |
| - | | | H25-1581-04 | PROTECTION BAG | T | |
| - | | * | H25-1620-04 | PROTECTION BAG | M | |
| - | | * | H50-2495-04 | ITEM CARTON CASE | ME | |
| - | | * | H50-2496-04 | ITEM CARTON CASE | T | |
| △ 645 | 2E | | J02-0370-05 | FOOT | | |
| △ 648 | 1E | | J42-0083-05 | POWER CORD BUSHING | | |
| - | | | J61-0307-05 | WIRE BAND | | |
| 651 | 2C | | K29-6741-04 | KNOB POWER | | |
| 652 | 2C | | K29-6742-04 | KNOB | | |
| 653 | 2C | | K29-6766-04 | KNOB | | |
| △ 655 | 1E | * | L07-2436-05 | POWER TRANSFORMER | M | |
| △ 655 | 1E | * | L07-2437-05 | POWER TRANSFORMER | TE | |
| S1 | | | S74-0065-05 | LEAF SWITCH | | |
| DISPLAY UNIT (X14-45xx-xx) | | | | | | |
| C1 | | | CE04KW1C332M | ELECTRO 3300UF 16WV | | |
| C2 | | | C90-3209-05 | ELECTRO 10UF 6.3WV | | |
| CN1 | | | E40-4632-05 | PIN ASSY | | |
| CN2 | | | E40-9965-05 | FLAT CABLE CONNECTOR | | |
| △ J1 | | | E03-0148-05 | AC OUTLET | K | |
| S1 -11 | | | S70-0031-05 | TACT SWITCH | | |
| △ D1 | | | KBP02ML-6127 | DIODE | | |
| D2 -7 | | | HSS104 | DIODE | | |
| D2 -7 | | | 1SS133 | DIODE | | |
| D8 ,9 | | | HSS104 | DIODE | | |
| D8 ,9 | | | 1SS133 | DIODE | | |
| △ ED1 | | | 8-BT-207GK | INDICATOR TUBE | | |
| △ IC1 | | | ICP-N25 | ANALOGUE IC | | |
| A1 | | | W02-2537-05 | ELECTRIC CIRCUIT MODULE | | |
| A1 | | | W02-2561-05 | ELECTRIC CIRCUIT MODULE | | |
| DECK UNIT (X25-6000-xx) | | | | | | |
| C1 | | | CE04KW1H101M | ELECTRO 100UF 50WV | | |
| C2 | | | CK73FB1H103K | CHIP C 0.010UF K | | |
| C3 | | | CE04KW1H100M | ELECTRO 10UF 50WV | | |
| C5 | | | CE04KW1H010M | ELECTRO 1.0UF 50WV | | |
| C6 | | | CE04KW1A221M | ELECTRO 220UF 10WV | | |
| C7 | | | CK73FB1H473K | CHIP C 0.047UF K | | |
| C8 | | | CE04KW1H010M | ELECTRO 1.0UF 50WV | | |
| C9 | | | CE04KW1A101M | ELECTRO 100UF 10WV | | |
| C10 | | | CE04KW0J331M | ELECTRO 330UF 6.3WV | | |
| C11 | | | CE04KW1A101M | ELECTRO 100UF 10WV | | |
| C12 | | | CE04KW0J331M | ELECTRO 330UF 6.3WV | | |

L : Scandinavia K : USA P : Canada R : Mexico 7 : DP-SE7
Y : PX(Far East, Hawaii) T : Europe E : Europe G : Germany 9 : DP-SE9
Y : AAFES(Europe) X : Australia M : Other Areas

△ indicates safety critical components.

PARTS LIST

DP-SE7/SE7(G)/SE9

* New Parts

Parts without **Parts No.** are not supplied.Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.Teile ohne **Parts No.** werden nicht geliefert.

3

| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|---------|----------|-----------|---------------|-------------------------------|--------------|----------|
| C13 | | | CE04KW1A101M | ELECTRO 100UF 10WV | | |
| C14 -16 | | | CK73FB1E104K | CHIP C 0.10UF K | | |
| C17 | | | CK73FB1H103K | CHIP C 0.010UF K | | |
| C18 ,19 | | | CK73FSL1H150J | CHIP C 15PF J | | |
| C20 | | | CK73FB1E104K | CHIP C 0.10UF K | | |
| C21 -26 | | | CC73FSL1H101J | CHIP C 100PF J | 7 | |
| C23 -26 | | | CC73FSL1H221J | CHIP C 220PF J | 9 | |
| C27 ,28 | | | CQ93FMG1H272J | MYLAR 2700PF J | 9 | |
| C27 ,28 | | | CQ93FMG1H332J | MYLAR 3300PF J | 7 | |
| C29 ,30 | | | CQ93FMG1H391K | MYLAR 390PF K | | |
| C31 ,32 | | | C90-3749-05 | ELECTRO 47UF 16WV | | |
| C33 ,34 | | | CQ93FMG1H471J | MYLAR 470PF J | | |
| C35 ,36 | | | CK73FB1H103K | CHIP C 0.010UF K | | |
| C39 | | | CE04KW0J331M | ELECTRO 330UF 6.3WV | 9 | |
| C40 | | | CK73FB1E104K | CHIP C 0.10UF K | 9 | |
| C41 | | | CE04KW1A101M | ELECTRO 100UF 10WV | 9 | |
| C42 | | | CK73FB1E104K | CHIP C 0.10UF K | 9 | |
| C43 | | | CK73FB1H103K | CHIP C 0.010UF K | 9 | |
| C44 | | | CE04KW1A101M | ELECTRO 100UF 10WV | | |
| C46 | | | CK73FB1H103K | CHIP C 0.010UF K | | |
| C47 | | | CK73FB1E104K | CHIP C 0.10UF K | | |
| C48 | | | CK73FB1H103K | CHIP C 0.010UF K | | |
| C49 | | | CE04KW1A101M | ELECTRO 100UF 10WV | | |
| C50 | | | CC73FCH1H330J | CHIP C 33PF J | | |
| C51 ,52 | | | CC73FSL1H221J | CHIP C 220PF J | 9 | |
| C53 ,54 | | | CC73FSL1H221J | CHIP C 220PF J | | |
| C55 | | | CK73FB1H103K | CHIP C 0.010UF K | | |
| C56 | | | CC73FSL1H101J | CHIP C 100PF J | | |
| C57 | | | CC73FSL1H220J | CHIP C 22PF J | 9 | |
| C58 -60 | | | CK73FB1H103K | CHIP C 0.010UF K | | |
| C61 ,62 | | | CC73FSL1H101J | CHIP C 100PF J | | |
| CN1 | | | E40-4296-05 | FLAT CABLE CONNECTOR | | |
| CN2 | | | E40-9875-05 | FLAT CABLE CONNECTOR | | |
| CN3 | | | E40-9966-05 | FLAT CABLE CONNECTOR | | |
| J1 | | | E63-0122-05 | PHONO JACK | | |
| J2 | | | E08-0312-05 | RECTANGULAR RECEPTACLE | | |
| P1 | | | J21-5845-04 | MOUNTING HARDWARE | | |
| X1 | | | L77-2217-05 | CRYSTAL RESONATOR(16.9344MHZ) | | |
| R1 | | | RK73FB2A472J | CHIP R 4.7K J 1/10W | | |
| R2 | | | RK73FB2A103J | CHIP R 10K J 1/10W | | |
| R3 ,4 | | | RK73FB2A181J | CHIP R 180 J 1/10W | | |
| R5 | | | RK73FB2A221J | CHIP R 220 J 1/10W | | |
| R7 | | | RK73FB2A203J | CHIP R 20K J 1/10W | | |
| R8 | | | RK73FB2A432J | CHIP R 4.3K J 1/10W | | |
| R9 | | | RK73FB2A181J | CHIP R 180 J 1/10W | | |
| R10 | | | R92-1867-05 | METAL 12K F 1/10W | | |
| R11 | | | R92-1868-05 | METAL 4.3K F 1/10W | | |
| R12 | | | RK73FB2A103J | CHIP R 10K J 1/10W | | |
| R13 | | | RK73FB2A101J | CHIP R 100 J 1/10W | | |
| R14 | | | RK73FB2A100J | CHIP R 10 J 1/10W | | |
| R15 | | | RK73FB2A221J | CHIP R 220 J 1/10W | | |
| R16 | | | RK73FB2A510J | CHIP R 51 J 1/10W | | |
| R17 | | | RK73FB2A101J | CHIP R 100 J 1/10W | | |

L : Scandinavia K : USA P : Canada R : Mexico 7 : DP-SE7
 Y : PX(Far East, Hawaii) T : Europe E : Europe G : Germany 9 : DP-SE9
 Y : AAFES(Europe) X : Australia M : Other Areas

⚠ indicates safety critical components.

* New Parts

Parts without **Parts No.** are not supplied.Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.Teile ohne **Parts No.** werden nicht geliefert.

4

| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|----------|----------|-----------|----------------|------------------------|--------------|----------|
| R18 | | | RK73FB2A103J | CHIP R 10K J 1/10W | | |
| R19 -30 | | | RK73FB2A103J | CHIP R 10K J 1/10W | | |
| R27 -30 | | | RK73FB2A332J | CHIP R 3.3K J 1/10W | | |
| R31 ,32 | | | RK73FB2A472J | CHIP R 4.7K J 1/10W | 7 | |
| R33 ,34 | | | RK73FB2A152J | CHIP R 1.5K J 1/10W | 9 | |
| R35 ,36 | | | RK73FB2A103J | CHIP R 10K J 1/10W | | |
| R37 ,38 | | | RK73FB2A104J | CHIP R 100K J 1/10W | | |
| R39 ,40 | | | RK73FB2A102J | CHIP R 1.0K J 1/10W | | |
| R41 ,42 | | | RK73FB2A101J | CHIP R 100 J 1/10W | | |
| R43 ,44 | | | RK73FB2A122J | CHIP R 1.2K J 1/10W | | |
| R45 ,46 | | | RK73FB2A102J | CHIP R 1.0K J 1/10W | | |
| R47 | | | RK73FB2A2R2J | CHIP R 2.2 J 1/10W | | |
| R48 | | | RK73FB2A101J | CHIP R 100 J 1/10W | 9 | |
| R49 | | | RK73FB2A240J | CHIP R 24 J 1/10W | 9 | |
| R50 -52 | | | RK73FB2A471J | CHIP R 470 J 1/10W | 9 | |
| R53 -56 | | | RK73FB2A472J | CHIP R 4.7K J 1/10W | 9 | |
| R57 | | | RK73FB2A105J | CHIP R 1.0M J 1/10W | | |
| R58 ,59 | | | RK73FB2A223J | CHIP R 22K J 1/10W | | |
| R60 ,61 | | | RK73FB2A472J | CHIP R 4.7K J 1/10W | | |
| R62 -74 | | | RK73FB2A473J | CHIP R 47K J 1/10W | | |
| R75 | | | RK73FB2A104J | CHIP R 100K J 1/10W | | |
| R76 ,77 | | | RK73FB2A473J | CHIP R 47K J 1/10W | | |
| R78 ,79 | | | RK73FB2A472J | CHIP R 4.7K J 1/10W | | |
| R80 | | | RK73FB2A103J | CHIP R 10K J 1/10W | | |
| R81 | | | RK73FB2A473J | CHIP R 47K J 1/10W | | |
| R82 -84 | | | RK73FB2A101J | CHIP R 100 J 1/10W | | |
| R85 ,86 | | | RK73FB2A331J | CHIP R 330 J 1/10W | | |
| R87 -90 | | | RK73FB2A104J | CHIP R 100K J 1/10W | | |
| R91 -94 | | | RK73FB2A472J | CHIP R 4.7K J 1/10W | | |
| R101-104 | | | RK73FB2A101J | CHIP R 100 J 1/10W | 9 | |
| R105 | | | RD14GB2E2R2J | FL-PROOF RD 2.2 J 1/4W | | |
| R106 | | | RD14GB2E1R0J | FL-PROOF RD 1 J 1/4W | | |
| R107,108 | | | RK73FB2A220J | CHIP R 22 J 1/10W | | |
| D1 | | | 1SR154-400 | DIODE | | |
| D2 | | | UDZ15B | ZENER DIODE | | |
| D3 | | | UDZ13B | ZENER DIODE | | |
| D3 | | | UDZ15B | ZENER DIODE | | |
| D4 | | | UDZ5.1B | ZENER DIODE | 7 | |
| D5 | | | UDZ2.7B | ZENER DIODE | 9 | |
| D6 ,7 | | | DA204U | DIODE | | |
| D8 ,9 | | | MA111 | DIODE | | |
| D10 | | | DA204U | DIODE | | |
| IC1 ,2 | | | M5237L | ANALOGUE IC | | |
| IC3 | | | PST993D-T | ANALOGUE IC | | |
| IC4 | | | UPD78044FGF071 | MI-COM IC | | |
| IC5 | | | KAN03 | CUSTOM IC | | |
| IC6 | | | AK4324-VF | MOS-IC | | |
| IC7 ,8 | | | NJM2100M | IC(OP AMPLIFIER) | 9 | |
| IC9 | | | TA8409S | MOS-IC | | |
| Q1 | | | 2SA954(L,K) | TRANSISTOR | | |
| Q2 | | | 2SB1370 | TRANSISTOR | | |
| Q2 | | | 2SB1375 | TRANSISTOR | | |
| Q3 | | | 2SA1534A | TRANSISTOR | | |
| Q4 | | | DTC124EUA | DIGITAL TRANSISTOR | 9 | |

⚠
⚠
⚠
⚠

L : Scandinavia K : USA P : Canada R : Mexico 7 : DP-SE7
 Y : PX(Far East, Hawaii) T : Europe E : Europe G : Germany 9 : DP-SE9
 Y : AAFES(Europe) X : Australia M : Other Areas

⚠ indicates safety critical components.

PARTS LIST

DP-SE7/SE7(G)/SE9

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

5

| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|--|----------|-----------|---|---|---|------------------------------|
| Q4 Q5 Q7 ,8 Q9 ,10 Q9 ,10 | | | UN5212 2SK246(Y,GR) 2SC2878(B) DTC124EUA UN5212 | DIGITAL TRANSISTOR FET TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR | | 9 |
| Q11 ,12 Q11 ,12 Q13 ,14 Q13 ,14 | | | DTA124EUA UN5112 2SA1586(Y,GR) 2SA1611(M5,M6) | DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR | | |
| A1 | | | W02-1114-05 | OSCILLATING MODULE | | |
| CD PLAYER UNIT (X32-3400-00) | | | | | | |
| C1 C2 C3 C4 C5 | | | CK73FB1H223K C92-0083-05 CC73FSL1H180J CC73FCH1H030C CK73FB1H103K | CHIP C CHIP C CHIP C CHIP C CHIP C | 0.022UF 47UF 18PF 3.0PF 0.010UF | K 4WV J C K |
| C6 C7 C8 C9 C10 | | | CK73FB1H222K CK73FB1H103K CK73FB1H333K CK73FB1H103K CK73FB1H472K | CHIP C CHIP C CHIP C CHIP C CHIP C | 2200PF 0.010UF 0.033UF 0.010UF 4700PF | K K K K K |
| C11 C12 C13 C14 C15 ,16 | | | C92-0083-05 CC73FSL1H470J CK73EB1C474K CK73EB1C105K CK73FB1E104K | CHIP C CHIP C CHIP C CHIP C CHIP C | 47UF 47PF 0.47UF 1.0UF 0.10UF | 4WV J K K K |
| C17 C18 C19 C20 C21 | | | C92-0080-05 CK73FB1H333K CK73FB1H102K CC73FSL1H221J CK73FB1H473K | C ELECTOR CHIP C CHIP C CHIP C CHIP C | 10UF 0.033UF 1000PF 220PF 0.047UF | 4WV K K J K |
| C22 C23 C24 C25 ,26 C27 | | | CK73FB1H103K CC73FSL1H101J C92-0080-05 CK73FB1H103K C92-0090-05 | CHIP C CHIP C C ELECTOR CHIP C CHIP C | 0.010UF 100PF 10UF 0.010UF 22UF | K J 4WV K 6.3WV |
| C28 ,29 C30 C31 C32 C33 ,34 | | | CK73FB1E104K C92-0041-05 CK73FB1H333K C92-0090-05 CK73FB1E104K | CHIP C CHIP-ELE CHIP C CHIP C CHIP C | 0.10UF 10UF 0.033UF 22UF 0.10UF | K 10WV K 6.3WV K |
| C35 ,36 C37 C38 C39 C40 | | | CK73FB1H102K CK73FB1H473K CK73FB1H152K CK73FB1H103K CK73FB1H332K | CHIP C CHIP C CHIP C CHIP C CHIP C | 1000PF 0.047UF 1500PF 0.010UF 3300PF | K K K K K |
| C41 C42 C43 C44 | | | CK73EB1C474K C92-0090-05 CK73FB1E104K CK73FB1H103K | CHIP C CHIP C CHIP C CHIP C | 0.47UF 22UF 0.10UF 0.010UF | K 6.3WV K K |
| CN1 CN2 CN3 | | | E40-9963-05 E40-9964-05 E40-3251-05 | FLAT CABLE CONNECTOR FLAT CABLE CONNECTOR PIN ASSY | | |

L : Scandinavia K : USA P : Canada R : Mexico 7 : DP-SE7
Y : PX(Far East, Hawaii) T : Europe E : Europe G : Germany 9 : DP-SE9
Y : AAFES(Europe) X : Australia M : Other Areas

⚠ indicates safety critical components.

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

5

| Ref. No | Add-ress | New Parts | Parts No. | Description | Desti-nation | Re-marks |
|-------------------------------------|----------|-----------|--|--|-------------------------------------|---|
| L1 | | | L40-1001-31 | SMALL FIXED INDUCTOR(10UH,K) | | |
| R1 R2 R3 ,4 R5 R6 | | | RK73FB2A753J RK73FB2A104J RK73FB2A203J RK73FB2A472J RK73FB2A912J | CHIP R CHIP R CHIP R CHIP R CHIP R | 75K 100K 20K 4.7K 9.1K | J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W |
| R7 R8 R9 R10 -13 R14 | | | RK73FB2A623J RK73FB2A105J RK73FB2A224J RK73FB2A683J RK73FB2A100J | CHIP R CHIP R CHIP R CHIP R CHIP R | 62K 1.0M 220K 68K 10 | J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W |
| R15 R16 R17 R18 R19 | | | RK73FB2A332J RK73FB2A243J RK73FB2A392J RK73FB2A101J RK73FB2A102J | CHIP R CHIP R CHIP R CHIP R CHIP R | 3.3K 24K 3.9K 100 1.0K | J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W |
| R20 ,21 R22 R23 R24 R25 | | | RK73FB2A334J RK73FB2A473J RK73FB2A101J RK73FB2A392J RK73FB2A682J | CHIP R CHIP R CHIP R CHIP R CHIP R | 330K 47K 100 3.9K 6.8K | J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W |
| R26 R27 R28 R29 R30 ,31 | | | RK73FB2A155J RK73FB2A223J RK73FB2A684J RK73FB2A105J RK73FB2A124J | CHIP R CHIP R CHIP R CHIP R CHIP R | 1.5M 22K 680K 1.0M 120K | J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W |
| R32 R33 R34 R35 R36 | | | RK73FB2A155J RK73FB2A514J RK73FB2A823J RK73FB2A104J RK73FB2A223J | CHIP R CHIP R CHIP R CHIP R CHIP R | 1.5M 510K 82K 100K 22K | J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W |
| R37 R38 R39 R40 R41 ,42 | | | RK73FB2A183J RK73FB2A104J RK73FB2A244J RK73FB2A184J RK73FB2A472J | CHIP R CHIP R CHIP R CHIP R CHIP R | 18K 100K 240K 180K 4.7K | J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W |
| R43 R44 R45 R46 R47 | | | RK73FB2A562J RK73FB2A102J RK73FB2A104J RK73FB2A332J RK73FB2A103J | CHIP R CHIP R CHIP R CHIP R CHIP R | 5.6K 1.0K 100K 3.3K 10K | J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W |
| R48 R49 R50 R51 -53 R54 | | | RK73FB2A332J RK73FB2A105J RK73FB2A104J RK73FB2A471J RK73FB2A472J | CHIP R CHIP R CHIP R CHIP R CHIP R | 3.3K 1.0M 100K 470 4.7K | J 1/10W J 1/10W J 1/10W J 1/10W J 1/10W |
| R55 R56 R57 R58 VR1 | | | RK73FB2A101J RK73FB2A6R8J RK73FB2A121J RK73FB2A6R8J R32-0049-05 | CHIP R CHIP R CHIP R CHIP R SEMI FIXED VARIABLE RESISTOR | 100 6.8 120 6.8 | J 1/10W J 1/10W J 1/10W J 1/10W |
| VR2 VR3 | | | R32-0048-05 R32-0049-05 | SEMI FIXED VARIABLE RESISTOR SEMI FIXED VARIABLE RESISTOR | | |

L : Scandinavia K : USA P : Canada R : Mexico 7 : DP-SE7
Y : PX(Far East, Hawaii) T : Europe E : Europe G : Germany 9 : DP-SE9
Y : AAFES(Europe) X : Australia M : Other Areas

⚠ indicates safety critical components.

PARTS LIST

DP-SE7/SE7(G)/SE9

DP-SE7/SE7(G)/SE9

PARTS LIST

* New Parts
Parts without **Parts No.** are not supplied.
Les articles non mentionnés dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

| Ref. No | Add- ress | New Parts | Parts No. | Description | Desti- nation | Re- marks |
|--------------------------------|--------------|--------------|----------------|----------------------------|------------------|--------------|
| D1 -4 | | | MA111 | DIODE | | |
| D5 | | | DA204U | DIODE | | |
| IC1 | | | CXA1782BQ*1 | ANALOGUE IC | | |
| IC2 | | | CXD2507AQ*1 | MOS-IC | | |
| IC3 | | | BA6398FP | ANALOGUE IC | | |
| Q1 | | | 2SC4081(R,S) | TRANSISTOR | | |
| Q2 | | | 2SA1586(Y,GR) | TRANSISTOR | | |
| Q3 -4 | | | 2SA1611(M5,M6) | TRANSISTOR | | |
| Q3 -4 | | | DTA124EUA | DIGITAL TRANSISTOR | | |
| Q3 -4 | | | UN5112 | DIGITAL TRANSISTOR | | |
| MECHANISM (D40-1571-05) | | | | | | |
| 1 | 2B | | A10-3325-08 | CHASSIS | | |
| 3 | 2A | | D10-3695-08 | SHAFT (TABLE GUIDE) | | |
| 5 | 3A | | D10-3696-08 | SLED SHAFT | | |
| 6 | 1A | | D12-0156-08 | CAM | | |
| 7 | 1A | | D13-1793-08 | GEAR (P) | | |
| 10 | 2A | | D13-1796-08 | GEAR (A)(S) | | |
| 11 | 3A | | D13-1797-08 | GEAR (B)(RP) | | |
| 12 | 1A | | D16-0713-08 | BELT | | |
| 13 | 2A | | D23-0328-08 | BEARING | | |
| 15 | 2B | | E40-8051-08 | PIN CONNECTOR (PC BOARD)5P | | |
| 20 | 3A | | G01-3969-08 | SPRING (S) COMPRESSION | | |
| 25 | 3A | | J02-1179-08 | PUBBER VIBRATION | | |
| 26 | 3A | | J02-1180-08 | PUBBER VIBRATION | | |
| 27 | 1A | | J19-5768-08 | HOLDER (MG/K) ASSY | | |
| 28 | 2A | | J19-5769-08 | HOLDER (BU) ASSY | | |
| 29 | 2B | | J70-0895-08 | PC BOARD LOADING | | |
| 30 | 3A | | J90-0846-08 | RING (LO)(S) CENTER | | |
| 31 | 2A | | J99-0592-08 | TABLE DISK | | |
| BB | 3A | | N09-3345-08 | SCREW (2.6X16) | | |
| FF | 2A | | N87-3010-46 | SCREW TAPPING (3X10) | | |
| 40 | 2B | | S74-0075-08 | SWITCH LEAF | | |
| 45 | 3B | | T25-0061-08 | PICKUP ASSY KSS-213C(R) | | |
| 46 | 2B | | T42-0873-08 | MOTOR ASSY LOADING | | |
| 47 | 3A | | T42-0907-08 | MOTOR CHASSIS ASSY(MB) | | |
| 48 | 3A | | T42-0875-08 | MOTOR GEAR ASSY(MB) | | |

L : Scandinavia
Y : PXI(Far East, Hawaii)
V : AAF-ES(Europe)

K : USA
T : Europe
X : Australia

P : Canada
E : Europe
M : Other Areas

R : Mexico
G : Germany
9 : DP-SE9

7 : DP-SE7

△ indicates safety critical components.

SPECIFICATIONS

CD player (DP-SE9)

Laser Semiconductor laser
Playing rotation 200 rpm ~ 500 rpm (CLV)
Frequency response 4 Hz ~ 20 kHz, ± 1.0 dB
Signal to noise ratio More than 100 dB
Dynamic range More than 95 dB
Total harmonic distortion Less than 0.004 % (at 1 kHz)
Channel separation More than 92 dB (at 1 kHz)
Wow & Flutter Unmeasurable Limit
Output level / impedance
Fixed 1.2 V / 1 k Ω
Digital output
Optical -15 dBm ~ -21 dBm
(wave length 660 nm)

General

Power consumption 10 W
Dimensions W : 213 mm
H : 97 mm
D : 249 mm
Weight (net) 2.2 kg

CD player (DP-SE7)

Laser Semiconductor laser
Playing rotation 200 rpm ~ 500 rpm (CLV)
Frequency response 4 Hz ~ 20 kHz, ± 1.0 dB
Signal to noise ratio More than 100 dB
Dynamic range More than 96 dB
Total harmonic distortion Less than 0.004 % (at 1 kHz)
Channel separation More than 92 dB (at 1 kHz)
Wow & Flutter Unmeasurable Limit
Output level / impedance
Fixed 1.2 V / 1 k Ω
Digital output
Optical -15 dBm ~ -21 dBm
(wave length 660 nm)

General

Power consumption 10 W
Dimensions W : 200 mm
H : 77 mm
D : 249 mm
Weight (net) 2.0 kg



1. KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.
2. Sufficient performance may not be exhibited at extremely cold locations (where water freezes.).

Note:

Component and circuit are subject to modification to insure best operation under differing local conditions. This manual is based on Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

KENWOOD CORPORATION

14-6,Dogenzaka 1-chome, Shibuya-ku, Tokyo, 150 Japan

KENWOOD SERVICE CORPORATION

P.O BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745, U.S.A.